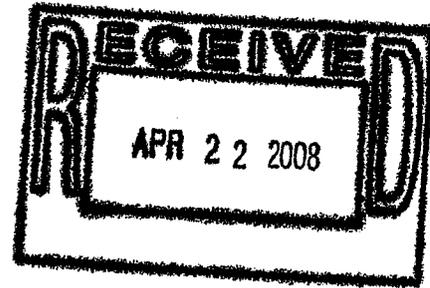


April 18, 2008



Mr. Chuck Shulock  
California Air Resources Board  
1001 I Street  
Sacramento CA, 95814

*Re: Southern California Edison Company Comments on  
Offsets*

Dear Mr. Shulock:

Southern California Edison Company (SCE) appreciates the opportunity to provide comments on offsets issues to the California Air Resources Board (CARB). SCE believes strongly that a validated offset policy is a critical component of any viable global warming policy, whether at the state, regional, national, or international level.

Offsets must play a significant role in any policy that hopes to succeed in developing a greenhouse gas (GHG) reduction program that actually diminishes significantly the risk of global warming. Global warming is a global problem with global causes.

Offsets are a practical necessity for any governing entity to effectively combat global warming. Only about six percent of the world's GHG emissions are currently capped. Even if all developed countries capped their emissions, only about half the world's emissions would be covered. Offsets are needed in order to reach the large segment of GHG emissions that not likely to be included in any emissions cap. Offsets are also needed to help reduce GHG emissions since there are limits to reductions that can be implemented cost-effectively with existing technologies. Time is needed to develop clean technologies such as carbon capture and storage and to deploy them world wide. In the meantime, offsets without geographic restrictions can be a useful and effective tool for reducing GHG emissions. SCE believes that offsets can be validated as real, permanent, quantifiable, verifiable, and enforceable under Assembly Bill (AB) 32.<sup>1</sup>

In addition to the foregoing, SCE addresses the specific offset questions set out at the CARB Technical Stakeholder Working Group Meeting held on April 4, 2008, below:

**1. Should California have an offsets program for compliance purposes?**

As stated earlier, SCE believes that offsets are an important tool in any mandatory compliance program that addresses GHG emission reductions. Additionally, AB 32 requires that CARB

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<sup>1</sup> California Global Warming Solutions Act of 2006, Cal. Health & Safety Code §38562(d)(1).

implement the law in a manner that “minimize[s] costs.”<sup>2</sup> Offsets provide the opportunity for lower cost compliance options regardless of the type of compliance program implemented. Fortunately, a GHG emissions reduction from a high quality offset has the same impact on global warming as any compliance measure, no matter where it occurs and what type of offset it is.

Studies have consistently shown that offsets help to keep the cost of compliance lower than alternative schemes. Resources for the Future (RFF) recently published a paper showing that Certified Emission Reductions in the European Union’s Emissions Trading Scheme offer about a 30% cost advantage over credits purchased within the system.<sup>3</sup> The Electric Power Research Institute (EPRI) published a recent report showing that “Allowing California to meet 10% of its emission reduction obligations through offsets lowers the economic loss by 15% to 20% compared to a scenario in which no offsets are allowed.”<sup>4</sup> In addition, in a July 2007 report, the U.S. Climate Change Science Program mentioned analyses showing that “for a simple policy regime, eliminating international where [i.e., offsets] and when flexibility, while assuming perfect where flexibility within countries, could potentially raise costs by an order of magnitude compared to a policy that employed where and when flexibility in all mitigation activities.”<sup>5</sup> Finally, the U.S. Environmental Protection Agency (EPA) analysis of the Lieberman-Warner federal climate bill found that “unlimited use of offsets could reduce allowance costs by 71% compared to the bill as written (which allows domestic offsets to meet 15% of the compliance obligation and international credits to be used to meet 15% of the compliance obligation), while prohibiting the use of offsets altogether could increase allowance costs by 93% compared to the bill as written.”<sup>6</sup>

In addition, offset projects will help to involve sectors not subject to a cap in GHG reduction, not only within California, but also beyond its borders as well. Taking the governments of many developing nations (particularly, China and India) at their word that they will not commit to GHG reductions,<sup>7</sup> it is unlikely that more than 50% of the total global anthropogenic emissions of GHG will be capped even if all developed nations, including the United States, commit to such an

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<sup>2</sup> *Id.* §38562(b)(1).

<sup>3</sup> Daniel S. Hall, “Resources for the Future, Offsets: Incentivizing Reductions While Managing Uncertainty and Ensuring Integrity,” at 18 (Sept. 2007) (“Prices in July 2007 for CERs delivered during the Kyoto compliance period (2008–2012) were \$12–\$18 per metric ton CO<sub>2</sub>e when purchase agreements were arranged directly between buyers and project developers. Prices for credits purchased in a secondary market have tended to be around 70 percent of the EU allowance price; thus CERs in the secondary market were selling for about \$20 per metric ton CO<sub>2</sub>e in July 2007.”) (Available at [http://www.weathervane.rff.org/Backgrounders/Oct07/Backgrounder\\_Offsets.pdf](http://www.weathervane.rff.org/Backgrounders/Oct07/Backgrounder_Offsets.pdf)).

<sup>4</sup> EPRI, “An Updated Macroeconomic Analysis of Recent California Climate Action Team Strategies,” at vi (October 2007) (available at [www.epriweb.com/public/00000000001015510.pdf](http://www.epriweb.com/public/00000000001015510.pdf)).

<sup>5</sup> U.S. Climate Change Science Program and the Subcommittee on Global Change Research “Scenarios of Greenhouse Gas Emissions and Atmospheric Concentrations, Synthesis and Assessment Product 2.1a,” at 137 (July 2007) (Available at <http://www.climatechange.gov/Library/sap/sap2-1/finalreport/default.htm>).

<sup>6</sup> U.S. Environmental Protection Agency (EPA), “EPA Analysis of the Lieberman-Warner Climate Security Act of 2008, S.2191 in 110<sup>th</sup> Congress,” at 6 (Mar. 14, 2008) (Available at <http://www.epa.gov/climatechange/economics/economicanalyses.html>).

<sup>7</sup> Keith Bradsher, “China to Pass U.S. in 2009 in Emissions,” N.Y. Times, Nov. 7, 2006 (“‘You cannot tell people who are struggling to earn enough to eat that they need to reduce their emissions,’ said Lu Xuedu, the deputy director general of Chinese Office of Global Environmental Affairs.”).

approach. Addressing only 50% of the global GHG emissions inventory will not successfully reduce global warming. Offsets, which allow the entry into the markets of those not under a GHG cap, offer a practical means of addressing the 50% of global emissions that is not likely to be capped in the foreseeable future.

**2. What should the project approval and quantification process be for approving projects?**

The project approval and quantification process needs to be expeditious, efficient, and transparent. The process needs to result in regulatory certainty to encourage investments in offsets reduction projects. The process must also ensure that offsets are real, permanent, quantifiable, verifiable, and enforceable. SCE believes that to ensure validity, offsets must be subject to verification by an independent third-party.

There should be maximum flexibility in the project selection process so long as the project can be shown to provide high quality offsets. SCE recommends that a hybrid approach be used where (1) project's developers propose and submit project types to be evaluated by CARB for possible inclusion (bottom-up), and (2) CARB identifies project types at the outset to be used by project developers (top-down).

Any process adopted by CARB must have sufficient rigor to ensure the credibility of the offset. The methodology must ensure the value of any credit generated from an offset program. Value from any offsets should be fully fungible, and offsets should be able to be traded on a one-to-one basis in any market-based program to which California's program is linked. Offsets can enhance the liquidity of the marketplace and serve to moderate prices for units of GHG emission reductions. CARB should expedite the development of the process to support offsets and send a clear signal that offsets will play an integral role in its program by including offsets in its scoping plan.

**3. Should there be quantitative limits on the use of offsets for compliance purposes? If so, how should the limits be determined?**

SCE strongly believes that there should be no limits on the use of offsets for all the reasons discussed above. Arbitrarily setting quantity limits on validated offsets serves only to drive up the cost of GHG reduction and to limit the role of non-capped sectors within and outside California; thus slowing and frustrating the effort to address successfully the very real threat of significant damage to the environment from global warming.

**4. Should California establish geographic limits or preferences on the location of projects that could be used to generate credits within the offsets system? If so, what should be the nature of those limits or preferences?**

SCE opposes restricting offsets by location of projects. There needs to be maximum flexibility to help mitigate the risk of economic harm to the California economy. Since a reduction in GHG emissions is equally beneficial no matter where that reduction takes place, it does not make sense to limit the geographic location of offsets. In addition, offsets are an effective way of getting other states and countries that are not currently impacted by climate change legislation or regulation

involved in the process to reduce GHG emissions. Unrestricted offsets also allow more rapid reductions in global GHG emissions than would otherwise be the case.

SCE's research shows that low-cost offset sources are more easily found outside California. For example, SCE and many U.S. electric utilities voluntarily adopted sulfur hexafluoride (SF<sub>6</sub>) recycling and conservation measures when encouraged to do so by the U.S. EPA. SF<sub>6</sub> is a synthetic gas that has excellent insulating properties. It is used in most modern high voltage electric transmission and distribution equipment such as circuit breakers. SF<sub>6</sub> also has very high global warming potential, approximately 24,000 times that of an equivalent amount of CO<sub>2</sub> with an atmospheric lifetime of 3,200 years.<sup>8</sup> Many other countries do not employ SF<sub>6</sub> reduction methods. SCE believes it can make a real difference by partnering with utilities in other countries and exporting its knowledge, by funding an offset program to reduce SF<sub>6</sub> emissions. Barring such innovative projects at the outset by restricting offsets to projects within California (or the Western Climate Initiative region) means that emissions will continue in other parts of the world to the detriment of progress in fighting global warming.

#### **5. Should California discount credits from offset projects?**

There should not be discount credits for offset projects. As long as projects meet the criteria of AB 32, the value of each emission reduction should be the same as if it came from an "in-house" project. Independent third party verification provides the proof that the emission reductions actually occurred and there should be no need for an application of the discount factor. Any perceived risk associated with a potential offset project is assessed by the marketplace between the seller and purchaser of the offset. The bottom line is a GHG emission reduction from an offset project that is deemed to be real, permanent, quantifiable, verifiable, and enforceable per AB 32 should have the same value as any other GHG emission reduction. A discounted credit would only serve to penalize high quality offset projects.

Very truly yours,



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cc: Kevin Kennedy  
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<sup>8</sup> See U.S. EPA, "SF<sub>6</sub> Emission Reduction Partnership for Electric Power Systems," (Available at <http://www.epa.gov/electricpower-sf6/overview.html>).